

REMARKS

Status of the Claims

Claims 1 – 26 remain pending in the application. Claims 8, 9, 12, 13, 21, 22, and 23 have been amended to more clearly define the subject matter recited therein, all claims having been acknowledged by the Examiner as reciting patentable subject matter, in an *Ex parte Quayle* allowance. Typographical errors unrelated to any objection by the Examiner have been corrected in Claims 12 and 23.

Claims to which the Examiner Has Objected

Discussion of Claims 8, 9, 21, and 22

Claims 8 – 9, and 21 – 22 have been objected to under 37 CFR § 1.75(a) for failing to particularly and distinctly point out the invention. As interpreted by the Examiner, these claims seemed to indicated that the element was being moved during the transition time as well as during the post actuation input (Claims 8 and 21) or during the pre-actuation input (Claims 9 and 22), which the Examiner noted would contradict Claims 1 and 14, since these two independent claims clearly indicate that the element *only moves* during the transition-time interval. However, it appears that the Examiner has simply misunderstood the intended meaning of Claims 8, 9, 21, and 22. In consideration of this misunderstanding, applicants have amended each of these claims to make their intended meaning clear, so that there is no apparent contradiction of the recitation provided in the independent claims from which they respectively depend.

A brief explanation will further clarify this issue. Subparagraph (d) of Claim 1 recites the step of: “*determining an optimal control input signal for a transition-interval input, and at least one of a pre-actuation input and a post-actuation input acting on the element to cause the element to move from the first position to the second position so as to achieve the selected optimization criterion, wherein the pre-actuation input applies energy to the system before the transition-time interval, the post-actuation input applies energy to the system after the transition-time interval, and the transition-interval input applies energy to the system during the transition-time interval.*” This recitation indicates that *at least one* of the pre-actuation input and the post-actuation input act on the element to cause the element to move.

As amended above, Claim 8 (and, in a comparable manner, Claim 21) now recites: “*wherein to move the element during the transition-time interval, further comprising the step of applying the transition-interval input signal during the transition-time interval, as well as applying the post-actuation input after the transition-time interval, but not applying the pre-actuation input before*

1 *the transition-time interval.*” Thus, this claim makes clear the condition in which the input signal is
2 applied during the transition-time interval, and in addition, the post-actuation input is applied (but not
3 the pre-actuation input). However, the claim also makes it clear that the element moves during the
4 transition-time interval – as was indicated in Claim 1. Likewise, Claim 9 (and similarly, Claim 22)
5 recites the condition in which the input signal was applied, and in addition, the pre-actuation input
6 was applied (but not the post-actuation input). These claims also make it clear that the element again
7 moves during the transition-time interval.

Even prior to amendment, these claims did not actually state that the element moved *during* the pre-actuation input (Claims 8 or 21), or *during* the post-actuation input (Claims 9 or 22). Nevertheless, applicants have amended these claims to make that point even clearer.

11 | Discussion of Claim 13

12 The Examiner objected to Claim 13 as being of improper dependent form, since it recites a
13 medium that could be infringed without infringing upon the respective base claim, which is drawn to
14 a method. Applicants have rewritten Claim 13 in independent form, to recite that when the machine
15 readable instructions that are stored on the medium are executed by a computing device, specific
16 steps (which are generally consistent – but not identical in every respect with those of Claim 1) are
17 carried out. Applicants believe that the Examiner will agree this amendment addresses the objection,
18 but does not raise any new issue.

19 Accordingly, it is submitted that with the above amendments and the Remarks provided, the
20 present application is in condition for allowance. The Examiner is thus asked to pass the case to issue
21 without further delay. Should any questions yet remain, the Examiner is invited to telephone
22 applicants' attorney at the number provided below.

Respectfully submitted,

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RMA:elm

I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid addressed to: Commissioner for Patents, Alexandria, VA 22313-1450, on September 22, 2005.

30 | Date: September 22, 2005

Elizabeth L. Miller



CUSTOMER NUMBER 25268

UNIV0189 The following have been received in the U.S. Patent and Trademark Office on the date stamped hereon:

1. Amendment Transmittal Letter (2pp, in duplicate)
2. *Ex Parte Quayle* Amendment (9pp)
3. \$100 check for 1 additional claim fees
4. Return receipt postcard

Re: U.S. Patent Application Serial No: 10/718,862

Filed: November 21, 2003

Applicant: Devasia et al.

Group Art Unit: 2651; Examiner: Sniczek, Andrew L.

Attorney Docket No. UNIV0189

Title: FAST POSITIONING OF DISK DRIVES AND OTHER PHYSICAL DEVICES

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